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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,003	03/22/2001	David M. Sabatini	WIBL-P02-001	5682

7590 12/17/2001
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1251 Avenue of the Americas
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New York, NY 10020

EXAMINER

SANDALS, WILLIAM O

ART UNIT	PAPER NUMBER
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1636

DATE MAILED: 12/17/2001

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/817,003

Applicant(s)

Sabatini

Examiner
William Sandals

Art Unit
1636



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 21, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification (37 CFR 1.78).

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only.
3. New formal drawings are required in this application because the 8th edition of MPEP, 608.02(b) no longer permits drawings to be held in abeyance. A copy of PTO form 948, Notice of Draftsperson's Patent Drawing Review is enclosed. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the Patent and Trademark Office no longer prepares new drawings.

Specification

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4. The disclosure is objected to because of the following informalities: The attempt to incorporate subject matter into this application by reference to an Internet URL is improper because this URL is not searchable through the US Patent Office, and its presence in a US Patent, when issued constitutes an unofficial source which cannot be reviewed by this office, and the information is subject to change without notice. All URL's should be removed from the text of the specification, for example see page 56 in the specification. Correction is required..

Appropriate correction is required.

5. The use of the trademark TRITON, EFFECTENE, QIAPREP, STEALTH MICRO SPOTTING PINS, PIXSYS, MILLIQ, SCANARRAY, TURBO MINIPREP, GENESTROM and PHOTOSHOP ~~ve been noted in this application: They should be capitalized wherever they~~ appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

6. Claims 29 and dependent claim 35 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

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dependent form, or rewrite the claim(s) in independent form. Claim 29 is a duplicate of claim 28, and claim 35 duplicates claim 34.

7. Claims 10, 12, 17, 20, 24, 28 and 29 are objected to because of the following informalities: Claims 10, 12, 17, 20 and 24 recite "DNA of interest" which should be "the DNA of interest". Claims 28 and 29, at line 3 have a duplication of "spotting a carrier DNA mixture". Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 19 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 19 recites the limitation "the vector-DNA" in line 2. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 28 recites the limitation "the carrier-DNA" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

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Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 25, 26, 28, 29, 31, 32, 34, 35 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,591,567.

US 4,591,567 taught (see the entire patent) a method of affixing DNA to a surface in a defined array where the DNA is mixed with (agar) gelatin and cells are placed on the array to transfer the DNA mixture to the cells on the array.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,811,274 in view of US 4,591,567.

The claims are drawn to a method of reverse transfection of eukaryotic cells by producing an array of DNA which has been deposited and dried on a surface in an array, then plating cells

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onto the surface array to allow the DNA to enter the cells, thereby producing an array of cells with introduced DNA. The DNA introduced into the cells may be expressed to produce protein. The expressed protein may be detected on the surface of the cells with an antibody.

US 5,811,274 taught (see especially the abstract, summary, the figures, columns 5-6, 9, and the claims) a method of reverse transfection of eukaryotic cells by producing a surface to which DNA has been deposited and dried, then plating cells onto the surface to allow the DNA to enter the cells, thereby producing cells with introduced DNA. The DNA introduced into the cells may be expressed to produce protein.

US 5,811,274 did not teach an array nor that the expressed protein may be detected on the surface of the cells with an antibody.

US 4,591,567 taught (see the entire patent) a method of producing an array of DNA on a surface to allow the reverse transfection of cells plated onto the array.

It would have been obvious to one of ordinary skill in the art at the time of filing of the instant application to combine the teachings of US 5,811,274 with US 4,591,567 to produce the instant claimed invention because both US 5,811,274 and US 4,591,567 taught the introduction of immobilized DNA into cells which were plated onto the surface. US 5,811,274 taught the use of the method to improve efficiency of introducing DNA into target cells, and US 4,591,567 taught the desirable use of an immobilized array of DNA in a method which improved the efficiency of the introduction of DNA into target cells.

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One of ordinary skill in the art would have been motivated to combine the teachings of US 5,811,274 with US 4,591,567 to produce the instant claimed invention because each of US 5,811,274 and US 4,591,567 taught a advantageous method for improving efficiency of introducing DNA into target cells by first immobilizing the DNA onto a surface and then plating cells onto the surface to introduce the DNA into the cells. Further, a person of ordinary skill in the art would have had a reasonable expectation of success in the producing the instant claimed invention given the teachings of US 5,811,274 and US 4,591,567.

Conclusion

16. Certain papers related to this application are *welcomed* to be submitted to Art Unit 1636 by facsimile transmission. The FAX numbers are (703) 308-4242 and 305-3014. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). NOTE: If applicant *does* submit a paper by FAX, the original copy should be retained by the applicant or applicant's representative, and the FAX receipt from your FAX machine is proof of delivery. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office.

Any inquiry concerning this communication or earlier communications should be directed to Dr. William Sandals whose telephone number is (703) 305-1982. The examiner normally can be reached Monday through Friday from 8:30 AM to 5:00 PM, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Elliott can be reached at (703) 308-4003.

Any inquiry of a general nature or relating to the status of this application should be directed to the Zeta Adams, whose telephone number is (703) 305-3291.

William Sandals, Ph.D.
Examiner
December 16, 2001


TERRY MCKELVEY
PRIMARY EXAMINER

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.